

1. (Amended) A pressure support system comprising:

a first housing member having a first plurality of cavities defined therein;

a second housing member having a second plurality of cavities defined therein,

wherein the first and the second plurality of cavities cooperate to define a first chamber, a second chamber, and a first conduit operatively connecting the first chamber and the second chamber in fluid communication responsive to the first and second housing members being in an assembled relation;

a pressure generating element disposed in the first chamber and adapted to generate a flow of breathing gas;

a valve disposed in the second chamber and adapted to control a pressure or a flow of breathing gas output from the pressure generating system; and

a fastening system that secures the first and second housing members in the assembled relation to secure the pressure generating system and the valve within the first and second chambers respectively.

3. (Amended) A pressure support system according to claim 1, wherein the first

and second plurality of cavities cooperate to further define (a) an external coupling and (b) a

second conduit operatively connecting the pressure generating element or the valve in fluid communication with the external coupling responsive to the first and second housing members being in the assembled relation.

4. (Amended) A pressure support system according to claim 3, further comprising a patient circuit coupled to the external coupling, wherein the patient circuit is adapted to communicate the flow of breathing gas created by the pressure generating element to an airway of a patient.

6. (Amended) A pressure support apparatus according to claim 1, wherein during normal operation of the pressure support system, the valve is downstream of the pressure generating element.

7. (Amended) A pressure support system according to claim 1, wherein at least one of the first and the second housing members includes a port defined therein for venting gas discharged by the valve from the valve chamber.

8. (Amended) A pressure support system according to claim 1, wherein the first and second plurality of cavities further define a third chamber and a second conduit operatively connecting the third chamber to the first chamber or the second chamber, and wherein the pressure support system further comprises:

a flow element disposed in the third chamber, and

a pair of flow measurement ports defined through the first housing member or the second housing member on opposite sides of the flow element to enable a pressure differential between the pressure on each side of the flow element to be measured.

20. A pressure support system according to claim 1, further comprising a pressure pick-off port defined in one of the first housing member and the second housing member so as to communicate an interior of the first chamber, the second chamber, or the first conduit with a pressure sensor.

Please add the following new claims

21. A pressure support system comprising:

a first housing member a first side and a second side and a first plurality of cavities defined in the first side, the first housing member also having a blower inlet port defined therethrough to communicate a flow of gas from the second side to the first side and a plurality of walls extending from the second side, wherein the plurality of walls define:

an inlet vent disposed on the second side adapted to receive gas from ambient atmosphere, and

a tortuous path from the inlet vent to the blower inlet port to deliver gas from ambient atmosphere received by the inlet vent to the blower inlet port;

a second housing member having a second plurality of cavities defined therein, wherein the first and second plurality of cavities cooperate to define (a) a first chamber adapted to receive a first component of the pressure support system, (b) a second chamber adapted to receive a second component of the pressure support system, and (c) a first conduit operatively

KUEHN. -- Appln. No.: 09/432,192

connecting the first component and the second in fluid communication responsive to the first and
second housing members being in an assembled relation; and

a fastening system that secures the first and second housing members in the

assembled relation.